

## Special Issue

# Applications of Nanocatalysts in Biomass Conversion: Volume II

### Message from the Guest Editor

The world energy demand has increased continuously over the past decade, which directly affects the increase in fossil fuel consumption, resulting in a rise in greenhouse gas emissions. Considering the pollution problems associated with fossil fuels, biomass resources emerge as a promising alternative energy source. However, the complex heterogeneity of biomass places new demands on the design and optimization of catalysts. In this context, the role of nanocatalysts becomes crucial when considering process activity, product quality, and optimal operating conditions. Thus, exploring novel nanocatalysts could provide new and efficient methods for the production of renewable biofuels under environmentally friendly conditions. In this Special Issue, recent results in the production of advanced biofuels using stable, highly active, inexpensive, and reusable nanocatalysts are presented. Papers providing physicochemical properties of nanocatalysts and insights into structure–activity relationships are very welcome. See more information at <https://www.mdpi.com/si/163188>

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### Guest Editor

Prof. Dr. Juan Carlos Serrano-Ruiz  
Materials and Sustainability Group, Department of Engineering,  
Universidad Loyola Andalucía, 41704 Seville, Spain

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### Deadline for manuscript submissions

closed (20 September 2023)



## Nanomaterials

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*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

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Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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